

U. S. DEPARTMENT OF ENERGY  
ROCKY FLATS PLANT  
ENVIRONMENTAL RESTORATION PROGRAM WEEKLY REPORT  
WEEK ENDING AUGUST 28, 1992

Section I - Interagency Agreement

OU 1 - 881 Hillside

Phase III RFI/RI Field Activities -- Work continues on the OU 1 Draft Phase I RFI/RI Report. A briefing was held for EPA and CDH (CDH could not attend) on August 24, 1992 at which preliminary information and findings were presented. The briefing went well and no major issues or contentions were raised by EPA. A risk assessment meeting was held on August 28, 1992 with EPA/CDH to discuss the use of qualified data and treatment of non-detects.

Informally, EPA has indicated a desire to have a groundwater modeling analysis of the 881 Hillside under the assumption that the french drain does not exist. Their basis is procedural (versus technical) so that they can perform a risk reduction accounting exercise.

IRA Operations -- Effluent Tank 205 is 100 percent full of treated water from the french drain. Discharge of the tank did not begin last week as planned, and is pending receipt of the lab analytical data which is now expected during the week ending September 4, 1992. Recent heavy rainfall has raised the level of water in the french drain which is being pumped and treated at the 891 treatment building.

The footing drain on the 881 Building backed up on August 24, 1992. Heavy rainfall resulted in a flow that was in excess of the carrying capacity of the 4 inch pipe that leads into the drain. IM/IRA operation began pumping water from the collection well into the french drain after 881 Building personnel notified IM/IRA personnel about the backup.

The feasibility of installing additional surge capacity in the influent tanks to handle storm events is being investigated. The installation of a 180,000 gallon tank will cost approximately 250K and would require a year and a half to complete.

The French Drain Monitoring Well Installation Program is complete. All eleven wells were finished the week ending August 21.

Feasibility Study -- Work continues on the OU 1 Corrective Measures Study/Feasibility Study (CMS/FS) Report. A very preliminary listing of candidate remediation technology process options has been developed.

The 881 Hillside Feasibility/Treatability Study borehole sample drilling program began on August 21, 1992. Drilling commenced on August 21 in IHSS 119.1. The drilling operation was slowed by the rain storm on August 24, 1992. Plans call for two locations to be drilled.

OU 2 - 903 Pad, Mound, East Trenches Area

Phase II RFI/RI Alluvial Field Activities -- A Technical Memorandum is being prepared to collect surficial soil samples to support the OU 2 Human Health Risk Assessment (HHRA).

Phase II RI Report (Alluvial) and HHRA -- A 7-month extension for delivery of the Phase II RFI/RI Report, which is due to the regulatory agencies on March 12, 1993, is under consideration by RFO. The extension is necessary due to the extended laboratory turnaround time being experienced. The

Phase II RFI/RI Report is supposed to contain the results of both the aauvial and bedrock programs. The bedrock program has not been initiated.

The Draft Final of Technical Memorandum #5, Exposure Scenarios, was sent to the regulatory agencies this week (August 24, 1992). The first draft of Tech Memo #6, Modeling Tech Memo, has been performed. RFO and EG&G are performing the internal review and commenting on the Tech Memo.

Feasibility Study (FS) -- The Statement of Work for the FS is complete and is now in the procurement cycle. EG&G anticipates awarding the contract under the new MTA subcontractor procurement system.

South Walnut Creek Bench-Scale Treatability Study -- The final OU 2 South Walnut Creek Bench-Scale Treatability Study Report has been reproduced and will be submitted to RFO during the week of August 24, 1992.

South Walnut Creek TM/IRA (GAC and RADS Removal System) -- The Field Treatability Unit (FTU) collected, treated, and discharged 79,000 and 120,980 gallons of surface water during the weeks ending August 19, and 26, 1992 respectively. Twenty-four hour manned operation continues without problems.

The OU 2 generator was repaired and returned to service on August 21, 1992. Prior to return, the vendor replaced the bearing within the unit and conducted several operational tests. The unit appears to be functioning well.

The number of pinhole leaks that developed in the two on-line GAC upper weld seams last week have continued to increase. A Calgon representative visited the site on August 18, 1992 to evaluate the problem. Calgon will address this problem under the equipment warranty.

A chain with a lock has been placed across the entrance of the OU 2 weir access driveway, and the driveway was posted with a sign. This should prevent unnecessary traffic from entering the area.

Due to Monday's storm event and high turbidity in the surface water, problems have been experienced with cleaning the membrane in the Field Treatability Unit/Radionuclides Removal System (FTU/RRS). Several solutions were attempted including changing the chemical cleaning agent from calcium hypochlorite to sulfuric acid/ hydrogen peroxide and increasing the chemical dose rates. A combination of the above have resulted in a solution to the problem.

Since August 24, ten drums of sludge have been processed. The processed sludge is the result of the turbid flow from the rainstorm and an accumulation of solids in the system within recent weeks.

OU 3 - Offsite Releases -- A survey for the endangered plant species *Spiranthes diluvialis* was satisfactorily completed; now soil trenching and drilling of groundwater monitoring wells can proceed.

A meeting was held with EG&G General Counsel to discuss the difficulties encountered in obtaining offsite property access agreements for OU 3 field work. A strategy was developed to answer the many legal questions arising from negotiations with the landowners. The slow pace of obtaining the agreements is starting to negatively impact the OU 3 field work schedule.

Offsite reservoir sediment sampling, originally scheduled for August 24, 1992 was postponed due to poor weather conditions. The USGS began sediment sampling August 27, 1992.

A kickoff meeting with Midwest Research Institute (MRI) to conduct the wind tunnel study was held August 26, 1992. The first task of MRI is to produce a technical description of the study that will form the basis for a Technical Memorandum to be submitted to EPA and CDH. Wind tunnel field work is planned for September 1992.

OU 4 - Solar Ponds -- The implementation plan for the OU 4 RFI/RI field work is scheduled for delivery to EG&G on September 4, 1992. The implementation plan will include a baseline schedule for the RFI/RI field work and will also include organizational charts and a project contact list.

A site tour of the OU 4 area for the RFI/RI subcontractor and support staff is scheduled for August 31, 1992.

Radiation Protection Technician training is scheduled for September 3, 1992. Additional training courses for the subcontractor are being scheduled. Training will include Health and Safety, Standard Operating Procedures, and General Employee Training for subcontractors.

OU 5 - Woman Creek -- The Final Health and Safety Plan (HSP) for OU 5 was completed on August 24, 1992. The draft Technical Memorandum 2 (TM 2), Surface Geophysics, was delivered for review and will be the second TM to go through the review process. The Revised Surface Water and Sediment Sampling and Analysis Plan, TM 1, is currently at EPA and CDH for review.

All subcontractor training, including Standard Operating Procedure (SOP) training, should be complete by September 4, 1992; if the HSP has been approved by IH, then field activities will commence on September 8, 1992, the day after Labor Day, with surveying necessary for geophysical investigations. The high purity Germanium survey and geophysics will begin upon approval of TMs and SOPs currently under review by the regulators.

OU 6 - Walnut Creek -- Work on incorporating comments in the OU 6 Health and Safety Plan (HSP) continues. The HSP must be approved before field work can commence. A draft of the TM outlining reductions in the OU 6 Work Plan was received by RFO. The environmental evaluation request for proposal was submitted to a subcontractor. A proposal is expected within one week.

OU 7 - Present Landfill -- Subcontract negotiations to implement the OU 7 RFI/RI Work Plan are scheduled to begin August 27, 1992. Contract award is anticipated by September 1, 1992.

OU 8 - 700 Area -- CDH and EPA are still reviewing the Draft Phase I RFI/RI Work Plan submitted on June 22, 1992. CDH and EPA were scheduled to submit comments on July 30, 1992.

CDH stated that they are about 3 weeks behind schedule for delivery of formal written comments. Because CDH is behind schedule in delivering comments to RFO, RFO will notify CDH and EPA that the September 28, 1992 IAG milestone will not be met. The proposed extension delivery date is November 13, 1992 based on a revised schedule that originally assumed agency comments would be received by September 11, 1992.

OU 9 - Original Process Waste Lines -The Technical Evaluations (TEs) of proposals to implement the OU 9 RFI/RI work plan were completed on August 10, 1992. In order to ensure that all technical areas necessary for implementation of the work plan for OU 9 are addressed, a final bid/proposal will be requested. The final bids/proposals will present proposal technical requirements determined to be necessary from the technical evaluations.

The Additional Data Compilation (ADC) portion of the Phase I RFI/RI Work Plan for OU 9 is continuing including planning of the radiological survey. OU 9 field work is expected to begin during January 1993 after a Health and Safety Plan, TM #1 and Implementation Plan have been submitted to and approved by the appropriate parties.

OU 10 - Other Outside Closures -- The revised Final OU 10 RFI/RI Work Plan was submitted to the regulatory agencies on July 17, 1992. The agencies are reviewing the Work Plan. Approval of the Work Plan is expected by the second week of September 1992.

OU 11 - West Sprav Field -- Verbal approval of the minor revisions to the OU 11 Work Plan were given by the CDH lead. The revisions were sent to the work plan subcontractor for incorporation into the Work Plan.

OU 12 - 400/800 Area -- The Draft RFI/RI Work Plan has been reviewed by CDH and EPA, and comments were received by DOE and EG&G from both agencies. Initial review of agency comments indicates minimal changes and/or problems with the approach and implementation of the draft plan. EPA had the fewest comments, and in general, is pleased with the approach of the Work Plan and Field Sampling Plan.

A meeting between RFO and EG&G was held August 26, 1992 to develop a common strategy before a resolution meeting with EPA and CDH that was held August 27, 1992. The Draft RFI/RI Work Plan has been reviewed by CDH and EPA, and comments were received by DOE and EG&G from both agencies. CDH comments specifically addressed concerns they have with the Field Sampling Plan as it relates to the sampling methodology for soils. They feel that a change in scope may be required to fully assess the contamination that may lie beneath the buildings which cannot be fully evaluated within the scope of the current Work Plan. RFO will review the work plan once more after the regulator's comments have been incorporated into the plan.

OU 13 - 100 Area - Comments were received from EPA and CDH on August 6, 1992 on the OU 13 Draft Work Plan. Efforts are underway to address these comments and modify the Draft Work Plan accordingly. The Final Phase I RFI/RI Work Plan for OU 13 is due to CDH on October 12, 1992.

OU 14 - Radioactive Sites -- The Draft Phase I RFI/RI Work Plan for OU 14 is being reviewed by the regulatory agencies. Revision of the draft document is pending resolution of any comments received from the agencies for incorporation into the Work Plan. Once comments are received they will be incorporated into the final work plan which is due on October 19, 1992..

OU 15 - Inside Building Closures -- Comments were received from EPA and CDH on August 28, 1992 on the OU 15 Draft Work Plan. A meeting is scheduled between DOE

and EG&G for September 2, 1992 to address comments before the document is modified. The final work plan is due to the regulators on October 26, 1992.

OU 16 - Low-Priority Sites -- The Final No Further Action Justification Document was submitted to the regulatory agencies on July 30, 1992. The agencies are reviewing the document. Agencies withheld document approval and requested a revised final by October 16, 1992. This effort is now beyond the defined scope of the IAG and budget assumptions.

#### Sitewide Activities

Risk Assessment -- In an August 17, 1992 meeting citing lack of timely relevance, EPA and CDH expressed a preference for postponing a previously scheduled Radionuclide Risk Assessment Workshop for the public and local government representatives (from early October to early 1993). RFO feels that the October date is relevant particularly with anticipated public interaction regarding the OU 3 Option "B" issue. RFO will pursue the October date.

#### Treatability Studies

Treatability Study on Ion Exchange -- The subcontract for the Sitewide Treatability Study on Ion Exchange Work Plan is in place and work on the document has been started by the subcontractor.

Soil Washing Demonstration (NRT) -- The single use instruction for sampling for this project has been approved and issued as a controlled document. Sampling is anticipated to take place following Labor Day and the test work will be scheduled at Nuclear Remediation Technology for late September.

Magnetic Separation -- The contract for this project is in the final stages of approval. RFO is reviewing this project for final approval. Once RFO approves the project, sampling can be arranged and the samples will be shipped to LANL for the test work.

Rocky Mountain University Consortium Review -- EG&G has authorized the Rocky Mountain University Consortium (Colorado State University, Idaho State and Denver University) to begin a review of Final Treatability Studies Plan with particular emphasis on the Technology Review and Selection processes. The review is based on a Statement of Work prepared by Richard Walters (CSU). A final report from the review is expected sometime in October.

#### Other Activities

PA Decontamination Facility -- Construction activities on the PA Decontamination Facility is proceeding rapidly. The berm area for the tank area is being built up. The fill is ready for the liner to be laid down. Contracts are being negotiated with subcontractors for the liner installation.

231 GAC Unit Installation -- A subcontractor is designing the GAC Unit at this time. Submittals for Inspection and Testing, Project Plan, Submittal Schedule, and a Quality Assurance Plan are presently being reviewed. A new, desired delivery date and budget will be delivered to EG&G Facilities Planning Management by August 31, 1992.

Mixed Waste Landfill Integrated Demonstration -- Sandia National Labs (SNL) and the Naval Research Labs would like to work with RFP on a demonstration of the towed magnetometer array. This demonstration would be a non-intrusive survey of the East Trenches area and the Old Landfill Site. Funding is not in place for this project. RFO needs to confirm that access to OU 2 East Trenches and the Old Landfill is available.

Site Planner Seminar -- Further discussions with Argonne National Labs is taking place to consider demonstration of the "Siteplanner" software at RFO by the Environmental Research and Development group. The project would develop user oriented oriented methods for planning activities related to RI/FS work and to develop methods to use the RFEDS and ARCINFO interface. This work would be initiated on the OU 2 IM/IRA subsurface project.

## Section II - Pondcrete Activities

Project Management -- A draft resource loaded schedule has been prepared to increase control of the project schedule and cost status. The draft schedule was completed the week of August 24, 1992. An activity status tracking system has been instituted so that the project schedule is continuously updated and remains useful for the duration of the project. The final project schedule budget status will be presented to AMEM on September 1, 1992.

Evaporator Systems -- Systems operation testing on Evaporator Systems in Building 910 continues and is expected to be complete September 3, 1992. Installation of sludge processing equipment by H-NUS is also in progress.

Pondcrete Processing Installation -- Installation work on sludge solidification equipment has been terminated because of a labor dispute. Halliburton (H-NUS) personnel are not cleared and require continuous escorting during installation of equipment located in the Protected Area (PA). Disagreements regarding safety practices developed. Union representatives directed the hourly escorts to refuse to escort Halliburton personnel until the alleged safety issues were resolved.

Work was stopped on August 20, 1992. It was believed that the disagreements would be resolved and work would resume. Only one issue remains unresolved, but work has not been resumed. The remaining issue is the adequacy of training for H-NUS personnel. EG&G believes that the required level of training is a management decision and the existing level of training is adequate. This work stoppage will result in at least a day for day slip in the current (8/31) project schedule.

## Section III - Surface Water Management

Spray Evaporation -- RFO is requesting permission from the Colorado Department of Health to spray evaporate over the landfill pond and to transfer water from ponds B-1 and B-2 to pond A-2 for spray evaporation. The landfill pond water quality is good but the water in pond B-2 has some trace organics. A risk assessment for spray evaporation of pond B-2 has been completed and shows values well below the acceptable carcinogenic range and Hazard Index.

South Interceptor Ditch Overflow -- On August 24, 1992 water overflowed (bypassed) the banks of the South Interceptor Ditch (SID) due to heavy rain. The bypassed water was contained in a section of the SID that has been replaced and is no longer in use. It did not flow into Woman Creek. Sandbags were placed along the edge of the SID where the bypass occurred. EPA, CDH and the City of Westminster were notified.

## Section IV - Transition/Decontamination and Decommissioning--

Transition Budget Reviews -- The transition work package budgets were reviewed for consistency with commitments in the draft transition plan.

Decontamination and Decommissioning Plan -- Work continued on the long term D&D Plan which focuses on building sequencing for D&D over the next ten years. When complete, this plan will form the basis for future D&D work at Rocky Flats.

#### Section V - Meetings

OU 1 Risk Assessment -- A meeting has been scheduled on September 4, 1992, with EPA/CDH to discuss risk characterization approach and uncertainty analysis.

OU 3 - Offsite Releases -- A kickoff meeting with Midwest Research Institute (MRI) to conduct the wind tunnel study was held August 26, 1992. The first task of MRI is to produce a technical description of the study that will form the basis for a Technical Memorandum to be submitted to EPA and CDH. Wind tunnel field work is planned for September 1992.

OU 12 Work Plan Meetings -- A meeting between RFO and EG&G was held August 26, 1992 to develop a common strategy before a resolution meeting with EPA and CDH that was held August 27, 1992. The Draft RFI/RI Work Plan has been reviewed by CDH and EPA, and comments were received by DOE and EG&G from both agencies. CDH comments specifically addressed concerns they have with the Field Sampling Plan as it relates to the sampling methodology for soils. They feel that a change in scope may be required to fully assess the contamination that may lie beneath the buildings which cannot be fully evaluated within the scope of the current Work Plan. RFO will review the work plan once more after the regulator's comments have been incorporated into the plan.

P&S Budget Review -- A review of the P&S Budget for FY93 is scheduled to be performed on August 31- September 1, 1992 in Bldg 111, Conf. Rm A.

#### Section VI - Future

- NEPA Documents Scheduled for Delivery to HQ: None
- August-October 1992 IAG Milestones Scheduled for Delivery from RFO to EPA/CDH:

No IAG Table 6 Milestones are scheduled for delivery to EPA/CDH in August

##### OU Milestone Date Due to EPA/CDH

08	Submit Final Phase I RFI/RI Work Plan	Sep. 28, 1992
12	Submit Final Phase I RFI/RI Work Plan	Oct. 5, 1992
13	Submit Final Phase I RFI/RI Work Plan	Oct. 12, 1992
14	Submit Final Phase I RFI/RI Work Plan	Oct. 19, 1992
15	Submit Final Phase I RFI/RI Work Plan	Oct. 26, 1992
01	Submit Draft Phase I RFI/RI Report	Oct. 28, 1992*
02	Submit Draft Subsurface IM/IRA Test Plan	Oct. 29, 1992

\*extended from original IAG date of July 30, 1992 with approval from EPA/CDH